

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A wireless e-mail system, comprising:

a wireless mobile device comprising an e-mail client;

an e-mail server;

a gateway;

a wireless network interconnecting said wireless mobile device and said gateway; and a broadband network interconnecting said gateway and said e-mail server; wherein when said client transmits a single self-contained request to said gateway via said wireless network to retrieve a set of e-mail related information from said e-mail server, said gateway retrieves at least said e-mail related information from said e-mail server via said broadband network using a plurality of transactions, compiles said retrieved information into a single self contained response and transmits said single response via said wireless network to said e-mail client.

2. (Original) The wireless e-mail system as in claim 1, wherein said self-contained request and said single response form a stateless request-response pair.

3. (Original) The wireless e-mail system as in claim 1, wherein said e-mail server is an IMAP server and said gateway further comprises an IMAP client application for communicating with said IMAP server.

4. (Original) The wireless e-mail system as in claim 1, wherein said e-mail server is a POP3 server and said gateway further comprises an POP3 client application for communicating with said POP3 server.

5. (Original) The wireless e-mail system as in claim 1, wherein said e-mail server is an SMTP compatible server and said gateway further comprises an SMTP client application for communicating with said SMTP compatible server.

6. (Original) The wireless e-mail system as in claim 1, wherein said gateway further comprises an application for monitoring e-mail traffic.
7. (Original) The wireless e-mail system as in claim 1, further comprising a mobile operator network, wherein said gateway is an extension of said mobile operator network.
8. (Original) The wireless e-mail system as in claim 1, wherein said single self-contained request and said single self contained response are transmitted using HTTP.
9. (Original) The wireless e-mail system as in claim 1, wherein said single self-contained request and said single self contained response are implemented using an XML structure.
10. (Original) A gateway interconnecting a wireless mobile device and an e-mail server, the wireless mobile device comprising an e-mail client and adapted for data communication with a wireless network, the e-mail server adapted for data communication with a broadband network, the gateway comprising: a first stateless interface interconnected with the wireless network; a second interface interconnected with the broadband network; and a channel management function; wherein when the e-mail client transmits a single self-contained request to said first interface via said wireless network to retrieve a set of e-mail related information from the e-mail server, said channel management function retrieves at least said e-mail related information from the e-mail server via said second interface and the broadband network using a plurality of transactions, compiles said retrieved information into a single self contained response and transmits said single response via said first interface and the mobile network to the e-mail client.
11. (Original) The gateway as in claim 10, wherein the e-mail server is an IMAP server, and said second interface is an IMAP interface.
12. (Original) The gateway as in claim 10, wherein the e-mail server is a POP3 server, and said second interface is a POP3 interface.
13. (Original) The gateway as in claim 10, further comprising an e-mail traffic monitoring

application.

14. (Original) The gateway as in claim 10, wherein said single self-contained request and response are transmitted using HTTP and said first interface is an HTTP interface.

15. (Currently Amended) A method ~~for retrieving e-mail related information from an e-mail server via a communications system comprising a wireless network and a broad band network, the method~~ comprising ~~the steps of:~~ in a client e-mail application on a wireless mobile device, forming a single request for the e-mail related information; transmitting said single request to a gateway via the wireless network, said gateway retrieving at least the e-mail related information from the server via the broadband network using a plurality of transactions, wherein said gateway compiles said retrieved information into a single response; transmitting said single response to said client application via said wireless network; and in said client application, retrieving the e-mail related information from said response.

16. (Currently Amended) The method of claim 15, wherein the e-mail related information is located in a mailbox on the server, wherein said request comprises a mailbox ID and further wherein said retrieving ~~step~~ comprises logging onto the server using the mailbox ID and downloading the requested e-mail related information.

17. (Original) The method of claim 15, wherein the e-mail related information is located in a mailbox on the server, wherein said gateway periodically determines if new e-mail is available in said mailbox and further wherein if at least one new e-mail message is available in said mailbox, said gateway transmits a new e-mail message notification to said client application via said wireless network.

18. (Currently Amended) The method of claim 15, wherein the e-mail server is an IMAP server, said mailbox has a mailbox name and a said periodic determining technique ~~step~~ comprises transmitting a SELECT command including said mailbox name to the server.

19. (Currently Amended) The method of claim 15, wherein the e-mail server is a POP3 server,

said mailbox has a mailbox name and ~~a said~~ periodic determining technique ~~step~~ comprises transmitting a UIDL command including said mailbox name to the server.

20. (Currently Amended) The method of claim 17, wherein said new e-mail message notification transmitting ~~step~~ comprises appending said new e-mail message notification to a subsequent single response.

21. (Currently Amended) The method of claim 17, wherein said wireless mobile device is an SMS compatible device and said new e-mail message notification transmitting ~~step~~ comprises transmitting said new e-mail message notification to said client e-mail application using SMS.

22. (Currently Amended) The method of claim 17, wherein said wireless mobile device is a WAP compatible device and said new e-mail message notification transmitting ~~step~~ comprises transmitting said new e-mail message notification to said client e-mail application using WAP.

23. (Original) The method of claim 17, wherein for each said new e-mail message said gateway retrieves at least a message sender and a message subject and appends said message sender and a message subject to a new e-mail list and wherein said new e-mail message notification comprises said new e-mail list.

24. (Original) The method of claim 17, wherein said gateway determines a quantity of new e-mail messages available in said mailbox and said new e-mail message notification comprises said quantity.

25. (Currently Amended) ~~A method for retrieving e-mail related information from an e-mail server via a communications system comprising a wireless network and a broadband network, the method comprising the steps of:~~ providing an e-mail gateway comprising a first stateless interface interconnected with the wireless network and a second interface interconnected with the broadband network; in a client e-mail application on a wireless mobile device, transferring a single request for the e-mail related information to said first interface via the wireless network; in said gateway: receiving said request at said first interface; retrieving at least the requested e-mail

related information from the server via the broadband network using a plurality of transactions; compiling said retrieved information into a single response; and transmitting said single response to said client application via said first interface and said wireless network; and in said client application, retrieving the e-mail related information from said response.

26. (Currently Amended) The method of claim 25, wherein the e-mail related information is located in a mailbox on the server, wherein said request comprises a mailbox ID and further wherein said retrieving ~~step~~ comprises logging onto the server using the mailbox ID and downloading the requested e-mail related information.

27. (Original) The method of claim 25, wherein the e-mail related information is located in a mailbox on the server, wherein said gateway periodically determines if new e-mail is available in said mailbox and further wherein if at least one new e-mail message is available in said mailbox, said gateway transmits a new e-mail message notification to said client application via said wireless network.

28. (Currently Amended) The method of claim 25, wherein the e-mail server is an IMAP server, said mailbox has a mailbox name and a said periodic determining technique ~~step~~ comprises transmitting a SELECT command including said mailbox name to the server.

29. (Currently Amended) The method of claim 25, wherein the e-mail server is a POP3 server, said mailbox has a mailbox name and a said periodic determining technique ~~step~~ comprises transmitting a UIDL command including said mailbox name to the server.

30. (Currently Amended) The method of claim 27, wherein said new e-mail message notification transmitting ~~step~~ comprises appending said new e-mail message notification to a subsequent single response.

31. (Currently Amended) The method of claim 27, wherein said wireless mobile device is an SMS compatible device and said new e-mail message notification transmitting ~~step~~ comprises transmitting said new e-mail message notification to said client e-mail application via SMS.

32. (Currently Amended) The method of claim 27, wherein said wireless mobile device is a WAP compatible device and said new e-mail message notification transmitting ~~step~~ comprises transmitting said new e-mail message notification to said client e-mail application using WAP.

33. (Original) The method of claim 27, wherein for each said new e-mail message said gateway retrieves at least a message sender and a message subject and appends said message sender and a message subject to a new e-mail list and wherein said new e-mail message notification comprises said new e-mail list.

34. (Original) The method of claim 27, wherein said gateway determines a quantity of new e-mail messages available in said mailbox and said new e-mail message notification comprises said quantity.

35-37. (Cancelled)